

Please delete page 5, beginning at line 9 through page 10, line 5 in its entirety and replace therewith:

A2

--An image processing system includes an image encoder system and an image decoder system that are coupled together. The image encoder system includes a block decomposer and a block encoder that are coupled together. The block encoder includes a color quantizer and a bitmap construction module. The block decomposer breaks an original image into image blocks, each having a plurality of pixel values (e.g. colors) or equivalent color points. Each image block is then processed by the block encoder. Specifically, the color quantizer computes some number of base points, or codewords, that serve as reference pixel values, such as colors, from which computed or quantized pixel values are derived. The bitmap construction module then maps at least one pixel value in the image block to one of the computed or quantized colors or one of the codewords. The codewords and bitmap are output as encoded image blocks.

The decoder system includes a block decoder having one or more decoder units and an output selector. The block decoder may also include a block type detector for determining the block type of an image block. The block type determines the number of computed colors to use for mapping each pixel color from an image block. Using the codewords of the encoded data blocks, the comparator and the decoder units determine the computed colors for the encoded image block and map each pixel to one of the computed colors. The output selector outputs the appropriate color, which is ordered in an image composer with the other decoded blocks to output an image representative of the original image.

The present invention also includes a method of compressing an original image block having a set of original colors. The method includes: computing a set of codewords from the set of original colors; computing a set of computed colors using the set of codewords; and mapping each original color to one of the computed colors or one of the codewords to produce an index for each original color.

The compressed or encoded image block, which has a first set of indices and a set of codewords, where a set is equal to or greater than one, is decoded by: computing at least one computed color using the set of codewords; and mapping an index within the first set of indices to one of the computed colors or one of the codewords.

Those of ordinary skill in the art will readily recognize that the present invention may be practiced using any general purpose computer system, such as the computer system

A2

described below, or any "hardwired" device specifically designed to perform the method, such as but not limited to devices implemented using ASIC or FPGA technology and the like.--

At page 11, line 8, please delete "4A-4F" and substitute --4A-4E--.

A3

At page 26, line 21, after "line." please insert --Those of ordinary skill in the art will readily recognize that the term optimal analog curve is not limited solely to a straight line but may include a set of parameters, such as pixel values or colors, that minimizes the moment of inertia or means square error when fitted to the center of gravity of the pixel colors in the image block. The set of parameters may define any geometric element, such as but not limited to a curve, a plane, a trapezoid, or the like.--

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At page 17, line 9, after "a" please delete --curve--.

At page 17, line 11, after "the" please delete --curve--.

At page 17, line 11, after "The" please delete --curve--.

At page 17, line 19, before "selection" please delete --curve--.

At page 20, line 7, please delete "forward" and substitute --forwards--.

At page 21, line 12, please delete "selected" and substitute --computed--.

At page 21, line 14, please delete "selecting" and substitute --computing--.

At page 21, line 15, please delete "selected" and substitute --computed--.

At page 21, line 16, after "are" please insert --computed or quantized--.

At page 23, line 3, please delete "selecting" and substitute --computing--.

At page 23, line 9, please insert --Those of ordinary skill in the art will readily

A4

recognize that selecting a block type for each image is not intended to be limiting in any way. Instead, the present invention may be limited to processing image blocks that are of a single block type. This eliminates the need to distinguish between different block types, such as the three and four color block types discussed above. Consequently, the block type module 345 in FIG. 3B and reference number 428 in FIG. 4C are optional and are not intended to limit the present invention in any way.--

At page 25, line 14, after "The" please delete --curve--.

At page 36, line 13, after "coupled" please insert --to--.

At page 44, line 14, please delete "off" and substitute --of--.

At page 44, line 17, please delete "unit" and substitute --until--.